## REMARKS

Claims 19-37 are currently pending in this application with claim 19 being in independent form. Claims 19 and 37 have been amended to change the phrase "gripped cable" to "gripped signal line" to overcome the rejection under 35 U.S.C. 112, second paragraph. Support for these amendments is provided in the claims as originally filed.

No new matter has been added.

## Response to Rejections

Claims 19-24 and 27-36 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 4,383,239 to Robert (hereinafter "Robert") in view of United States Patent No. 4,976,157 to Berthold (hereinafter "Berthold"). The Office Action asserts that Robert shows a gripping means for a gripping a signal line (4) comprising at least one rigid components (3) adapted to grip a sleeve of the signal line wherein the gripping means includes a spring element (2) made of a flexible material, which engages and exerts a biasing force on the rigid component and away from the signal line to remove load or loads on the rigid component. The Office Action further asserts that the spring element is embodied as a resilient sleeve on which the rigid component is placed and the spring element is placed between two rigid components (3) and (1). The Office Action acknowledges that Berthold fails to teach that the signal line is an optical cable. The Office Action then relies upon Berthold as teaching that optical cables are "widely used" and that it would have been obvious to replace the line sensor of Robert with "widely used" optical cables, such as shown by Berthold.

Applicants respectfully traverse this rejection for the following reasons. Robert is directed to a detector for detecting the passage of heavy objects on a roadway and is concerned with preventing/protecting the signal line from extraneous external loads, such as pressure waves, which can provide inaccurate readings. In contrast thereto, the claimed invention is directed to a gripping means having a spring element for exerting a biasing force to the rigid component and away from the signal line to remove a load of the rigid component from the signal line. In particular, it is noted that the "rigid component 3" in Robert directly contacts the "sensor 4" and the "spring element 2" is a shock absorbing material positioned between "rigid component 3" and "rigid component 1". While it may ***appear*** that "spring element 2" exerts a

biasing force to the "rigid component 1" and away from the signal line, this "spring element 2" would not seem capable of removing a load of "rigid component 3" from the "sensor line 4".

With respect to the combination of Robert with Berthold, the Office Action asserts that optical cables are widely used for signal transmission and Berthold shows the use of an optical fiber for such use. The Office Action further asserts that it would have been obvious to use an optical cable as a signal line due to its capability to transmit signal at high speed as shown by Berthold. Applicants respectfully disagree. The optical cable of Berthold is used to measure the attenuation of light across the gap from one fiber to another which is proportional to a flow rate. One having ordinary skill in the art would not be motivated to use the optical sensor of Berthold in Robert because the type of optical cable taught in Berthold would not work in the Robert arrangement.

Submitted concurrently herewith is a Declaration under 37 C.F.R. §1.132 of R. Tielbeke, the managing Director of the assignee of the present invention, Lightspeed Inventions. As stated in the Declaration, the combination of Robert with Berthold fails to teach or render obvious the presently claimed invention. As discussed in the Declaration, the device of Robert is concerned with preventing/protecting the signal line from extraneous external loads, which can provide inaccurate readings, and fails to teach the claimed feature of a spring element for exerting a biasing force to the rigid component and away from the signal line to remove a load of the rigid component from the signal line. Berthold is completely different and functions in a completely different manner than the present invention. Berthold is concerned with a fiber optic flow sensor situated in a conduit 12 which encloses two fiber optic cables 15, 16 held by a holding mechanism or tube 14. The fiber optic cables are axially aligned but separated by a gap 18. Fluid flow in the conduit, as depicted by 24 produces a deflection of tube 14 and the attenuation of light transmitted from one fiber to the other. This deflection is proportional to the flow rate allowing for the measurement of this flow rate. In the present invention, the resilient member exerts a biasing force to the rigid member away from the signal line. This feature is not shown and is not rendered obvious by the combination of Robert with Berthold.

Further still, the present invention enjoys significant commercial success as evidenced by the Declaration under 37 C.F.R. §1.132 of R. Tielbeke. As noted in the

Declaration, the invention enjoys significant commercial success internationally, in technical areas demanding precise and reliable sensors. The inventors have developed a plethora of applications for the invention in cooperation with a number of partners in various technological areas. Further still, the invention has been licensed by several industrial partners, which is an indication that the invention is perceived as a true improvement in the filed of line sensor gripping means. A list of companies and applications the invention is applied is listed in the Table attached to the Declaration.

It is noted that Robert was made of record during prosecution of the corresponding EP application. This corresponding EP application has now issued as EP 1 527 428.

Accordingly, for the reasons set forth above, it is respectfully requested that the rejection of claims 19-24 and 27-36 under 35 U.S.C. §103(a) be withdrawn as the combination of Robert with Berthold fails to render these claims obvious.

Claims 25-26 are rejected under 35 U.S.C. §103(a) as being obvious over Robert in view of Berthold and further in view of United States Patent No. 5,703,754 to Hinze (hereinafter "Hinze").

The Office Action acknowledges that the combination of Robert with Berthold fails to teach the claimed feature of a hardness of the rigid component being between 10-100 shores. Hinze is relied upon as teaching materials having a hardness of between 10-11 shores. Hinze fails to overcome the deficiencies of Robert/Berthold combination. Hinze shows adhesive sealant as materials used for construction of a circuit board wherein a shore hardness of 40-50, after curing of the sealant, is preferred (col. 3, lines 34-35). The function of the hardness is apparently to make the board tamper deterrent and tamper evident (col. 3, line 42). This implies that the cured sealant has a lack of resilience, as resilient materials could come back to their original form after a tampering attempt.

Moreover, as stated above, the combination of Robert and Berthold with Hinze would not lead to the invention as recited in base claim 19, as the claimed features of a rigid component adapted to grip on a sleeve of the signal line and a spring element engaging on the rigid component to exert a biasing force to the rigid component and away from the signal line to

remove a load of the rigid component from the signal line is still lacking in the Robert/Berthold combination.

For the reasons set forth above, it is respectfully requested that the rejection of claims 25-26 under 35 U.S.C. §103(a) be withdrawn as the combination of Robert and Berthold with Hinze fails to render these claims obvious.

**CONCLUSION**

Based on the foregoing amendments and remarks, reconsideration of the rejection and allowance of pending claims 19-37 is respectfully requested.

Respectfully submitted,

THE WEBB LAW FIRM

By_____

John W. McIlvaine
Registration No. 34,219
Attorney for Applicant
436 Seventh Avenue
700 Koppers Building
Pittsburgh, PA 15219
Telephone: (412) 471-8815
Facsimile: (412) 471-4094
E-mail: webblaw@webblaw.com